

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-24. (Canceled)

25. (Original) A process for forming a pattern on a substrate by deposition of an organic material comprising the steps of:

depositing a semiconducting organic material in a solvent onto a substrate by ink-jet printing; and

evaporating the solvent, whereby said organic material remains on the substrate.

26. (Original) The process of claim 25, further comprising drying the deposited material to remove said solvent.

27. (Original) The process of claim 25 wherein said organic material is a luminescent polymer.

28. (Original) The process of claim 25 wherein said material includes polyvinylcarbazol film.

29. (Previously Presented) The process of claim 25 wherein said solvent is organic.

30. (Original) The process of claim 25 wherein said material includes light emitting dyes.

31. (Previously Presented) The process of claim 30 wherein said light emitting dyes include coumarin.

32. (Original) The process of claim 31 wherein said coumarin is coumarin 6.

33. (Previously Presented) The process of claim 31 wherein said coumarin is coumarin 1.

34. (Previously Presented) The process of claim 31 wherein said coumarin is coumarin 6 and coumarin 1.

35. (Original) The process of claim 25 wherein said organic material is a mixture of polymers and other organic molecules.

36. (Original) A process for making organic light emitting diodes comprising the steps of:

depositing a semiconducting organic material in a solvent onto a substrate by ink-jet printing; and

evaporating the solvent, said organic material remaining on the substrate.

37. (Original) The process of claim 36 wherein said depositing step operates an ink-jet printer in a mode to create a continuous sheet of polymer.

38. (Original) The process of claim 37 further including the step of metallizing said ink-jet printed substrates.

39. (Previously Presented) The process of claim 38 further including the step of depositing a top metal contact on said substrate.

40. (Previously Presented) The process of claim 39 wherein said top metal contact is deposited through a mask.

41. (Previously Presented) The process of claim 36 further including the step of depositing bottom contacts on said substrate.

42. (Previously Presented) The process of claim 39 wherein said top metal contact is deposited in a pattern.

43. (Previously Presented) The process of claim 41 wherein said bottom contacts are deposited in a pattern.

44. (Original) The process of claim 36 further wherein said organic material includes light emitting dyes.

45. (Previously Presented) The process of claim 44 further including the step of depositing a top contact on said organic material.

46. (Previously Presented) The process of claim 45 further including the step of depositing bottom contacts on said substrate.

47-53. (Canceled)

54. (Original) A process for forming a pattern on a substrate by deposition of an organic material comprising the steps of:

depositing organic material including polyvinylcarbazol film in a solvent onto a substrate by ink-jet printing; and

evaporating the solvent, whereby said organic material remains on the substrate.

55. (Original) The process of claim 54, further comprising drying the deposited material to remove said solvent.

56. (Original) The process of claim 54 wherein said organic material is semiconducting.

57. (Original) The process of claim 54 wherein said organic material is a luminescent polymer.

58. (Previously Presented) The process of claim 54 wherein said solvent is organic.

59. (Original) The process of claim 54 wherein said material includes light emitting dyes.

60. (Previously Presented) The process of claim 59 wherein said light emitting dyes include coumarin.

61. (Original) The process of claim 60 wherein said coumarin is coumarin 6.

62. (Previously Presented) The process of claim 60 wherein said coumarin is coumarin 1.

63. (Previously Presented) The process of claim 60 wherein said coumarin is coumarin 6 and coumarin 1.

64. (Original) The process of claim 54 wherein said organic material is a mixture of polymers and other organic molecules.

65. (Original) A process for making organic light emitting diodes comprising the steps of:

depositing organic material including polyvinylcarbazol film in a solvent onto a substrate by ink-jet printing; and

evaporating the solvent, said organic material remaining on the substrate.

66. (Original) The process of claim 65 wherein said depositing step operates an ink-jet printer in a mode to create a continuous sheet of polymer.

67. (Original) The process of claim 66 further including the step of metallizing said ink-jet printed substrates.

68. (Previously Presented) The process of claim 67 further including the step of depositing a top metal contact on said substrate.

69. (Previously Presented) The process of claim 68 wherein said top metal contact is deposited through a mask.

70. (Previously Presented) The process of claim 65 further including the step of depositing bottom contacts on said substrate.

71. (Previously Presented) The process of claim 68 wherein said top metal contact is deposited in a pattern.

72. (Previously Presented) The process of claim 70 wherein said bottom contacts are deposited in a pattern.

73. (Original) The process of claim 65 further wherein said organic material includes light emitting dyes.

74. (Previously Presented) The process of claim 73 further including the step of depositing a top contact on said organic material.

75. (Previously Presented) The process of claim 74 further including the step of depositing bottom contacts on said substrate.

76. (Previously Presented) The process of claim 37 further including the step of metallizing said ink-jet printed organic material.

77. (Previously Presented) The process of claim 66 further including the step of metallizing said ink-jet printed organic material.

78. (Previously Presented) The process of claim 25 wherein the semiconducting organic material is selected from the group consisting of polyalkylthiophene, poly(2,5-thienylene vinylene), polyarylene vinylene, polyparaphenylene, polyalkylfluorene, pyrazoline dimer, quinolizine carboxylic acid, benzopyrylium perchlorate, benzopyranoquinolizine, rubrene, phenanthroline europium complex, oxadiazole derivatives, DSA, aluminum quinolinol complex, Bebq, triazole derivative, azomethine complex, porphine complex, benzoxadiazol, aromatic diamine based compound, MTDATA, quinacridone, bisstil anthracene derivative, polyvinyl carbazole, phthalocyanine based complex, porphine based compound, NPD and polyaniline.

79. (New) A process for forming a pattern on a first layer comprising the steps of:
depositing a semiconducting organic material in a solvent onto the first layer
by ink-jet printing; and
evaporating the solvent, whereby said organic material remains on the first
layer.